GenCore version 5.1.5

OM nucleic - nucleic search, using sw model

Run on: June 1, 2003, 20:03:50 ; Search time 2844 Seconds
(without alignments)
12710.382 Million cell updates/sec

Title: US-09-625-573-1
Perfect score: 2232
Sequence: 1 GGATTGAACAAGGACGCATT.....TATAACTATGTTGATAAAAG 2232

Scoring table: OLIGO_NUC
Gapop 60.0 , Gapext 60.0

Searched: 16154066 seqs, 8097743376 residues

Word size : 0

Total number of hits satisfying chosen parameters: 32308132

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Database : EST:*
1: em_estba:*
2: em_esthum:*
3: em_estin:*
4: em_estmu:*
5: em_estov:*
6: em_estpl:*
7: em_estro:*
8: em_htc:*
9: gb_est1:*
10: gb_est2:*
11: gb_htc:*
12: gb_est3:*
13: gb_est4:*
14: gb_est5:*
15: em_estfun:*
16: em_estom:*
17: gb_gss:*
18: em_gss_hum:*
19: em_gss_inv:*
20: em_gss_pln:*
21: em_gss_vrt:*
22: em_gss_fun:*
23: em_gss_mam:*
24: em_gss_mus:*
25: em_gss_other:*
26: em_gss_pro:*
27: em_gss_rod:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.		Score	% Query Match	Length	DB	ID	Description
c	1	396	17.7	457	9	AA694175	AA694175 zi42a04.s
c	2	367	16.4	407	14	BQ027284	BQ027284 UI-H-CO0-
	3	359	16.1	469	10	AV715904	AV715904 AV715904
c	4	352	15.8	398	9	AA807940	AA807940 nu90f10.s
	5	272	12.2	563	9	AA034153	AA034153 zi06f10.r
	6	243	10.9	410	14	H58584	H58584 yr06f06.r1
c	7	238	10.7	289	9	AA034154	AA034154 zi06f10.s
	8	236	10.6	422	14	H58597	H58597 yr06h06.r1
c	9	232	10.4	467	14	H58254	H58254 yr06h06.s1
c	10	179	8.0	461	14	H58245	H58245 yr06f06.s1
	11	128	5.7	469	17	B84215	B84215 RPCI11-22K6
	12	122	5.5	176	9	AI312331	AI312331 ta78e11.x
	13	108	4.8	207	12	BG315432	BG315432 PO2.0.308
	14	68	3.0	121	12	BF175316	BF175316 MYE4866 M
	15	65	2.9	807	13	BI764263	BI764263 603045953
	16	33	1.5	447	9	AA671573	AA671573 vl04g01.r
	17	33	1.5	487	10	BE656336	BE656336 UI-M-BH0-
	18	33	1.5	542	9	AA547303	AA547303 vk28h04.r
c	19	23	1.0	452	9	AI851510	AI851510 UI-M-BH0-
	20	22	1.0	1236	12	BG292833	BG292833 602389845
c	21	21	0.9	172	9	AA318949	AA318949 EST21122
	22	21	0.9	180	13	BG940587	BG940587 ax06e06.y
c	23	21	0.9	296	10	BB386318	BB386318 BB386318
c	24	21	0.9	300	14	R53318	R53318 yg82h04.r1
c	25	21	0.9	309	12	BE909618	BE909618 601501611
c	26	21	0.9	310	14	H20897	H20897 ym48f07.r1
c	27	21	0.9	406	14	R25491	R25491 yg44b06.r1
c	28	21	0.9	410	9	AA281342	AA281342 zs94g08.r
	29	21	0.9	433	9	AI218647	AI218647 qf48c07.x
c	30	21	0.9	445	17	AZ938335	AZ938335 2M0196D24
	31	21	0.9	453	13	BM150403	BM150403 TCBAP1D07
c	32	21	0.9	472	9	AA436287	AA436287 zv22c03.r
c	33	21	0.9	492	12	BE954472	BE954472 UI-M-CE1-
c	34	21	0.9	525	9	AA714861	AA714861 nx93h11.s
	35	21	0.9	555	17	BH281895	BH281895 CH230-191
c	36	21	0.9	610	12	BF130511	BF130511 601818643
c	37	21	0.9	632	17	AZ417081	AZ417081 1M0192A12
c	38	21	0.9	633	10	AW960725	AW960725 EST372796
	39	21	0.9	650	10	BB630138	BB630138 BB630138
c	40	21	0.9	670	14	BQ787658	BQ787658 im14b01.x
c	41	21	0.9	673	12	BE883230	BE883230 601508658
c	42	21	0.9	682	9	AU127682	AU127682 AU127682
	43	21	0.9	778	9	AU140261	AU140261 AU140261
c	44	21	0.9	782	12	BG104799	BG104799 602311755
	45	21	0.9	803	17	AZ713219	AZ713219 RPCI-24-1

ALIGNMENTS

RESULT 1
AA694175/c
LOCUS AA694175 457 bp mRNA linear EST 16-DEC-1997
DEFINITION zi42a04.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:433422 3', mRNA sequence.
ACCESSION AA694175
VERSION AA694175.1 GI:2695113
KEYWORDS EST.
SOURCE human.
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1 (bases 1 to 457)
AUTHORS Hillier,L., Allen,M., Bowles,L., Dubuque,T., Geisel,G., Jost,S., Krizman,D., Kucaba,T., Lacy,M., Le,N., Lennon,G., Marra,M., Martin,J., Moore,B., Schellenberg,K., Steptoe,M., Tan,F., Theising,B., White,Y., Wylie,T., Waterston,R. and Wilson,R.
TITLE WashU-NCI human EST Project
JOURNAL Unpublished (1997)
COMMENT Contact: Wilson RK
Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
Tel: 314 286 1800
Fax: 314 286 1810
Email: est@watson.wustl.edu
This clone is available royalty-free through LLNL ; contact the IMAGE Consortium (info@image.llnl.gov) for further information.
Seq primer: -40m13 fwd. ET from Amersham
High quality sequence stop: 455.

```
FEATURES             Location/Qualifiers
     source          1. .457
                     /organism="Homo sapiens"
                     /db_xref="GDB:1333191"
                     /db_xref="taxon:9606"
                     /clone="IMAGE:433422"
                     /clone_lib="Soares_fetal_liver_spleen_1NFLS_S1"
                     /sex="male"
                     /dev_stage="20 week-post conception fetus"
                     /lab_host="DH10B (ampicillin resistant)"
                     /note="Organ: Liver and Spleen; Vector: pT7T3D (Pharmacia)
                     with a modified polylinker; Site_1: Pac I; Site_2: Eco RI;
                     This is a subtracted version of the original Soares fetal
                     liver spleen 1NFLS library.  1st strand cDNA was primed
                     with a Pac I - oligo(dT) primer [5'
                     AACTGGAAGAATTAATTAAAGATCTTTTTTTTTTTTTTTTTT 3'],
                     double-stranded cDNA was ligated to Eco RI adaptors
                     (Pharmacia), digested with Pac I and cloned into the Pac I
                     and Eco RI sites of the modified pT7T3 vector.  Library
                     went through one round of normalization. Library
                     constructed by Bento Soares and M.Fatima Bonaldo."
BASE COUNT      137 a      96 c      82 g     142 t
ORIGIN

  Query Match             17.7%;  Score 396;  DB 9;  Length 457;
  Best Local Similarity   100.0%;  Pred. No. 1.5e-200;
  Matches  396;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    1832 TTGGCTTCTAATCAAAGCTTTTAAACCCTATTGGTAAAGAATGGAAGGTGGAGAAGCTCC 1891
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     396 TTGGCTTCTAATCAAAGCTTTTAAACCCTATTGGTAAAGAATGGAAGGTGGAGAAGCTCC 337

Qy    1892 CTGAAGTAAGCAAAGACTTTCCTCTTAGTCGAGCCAAGTTAAGAATGTTCTTATGTTGCC 1951
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     336 CTGAAGTAAGCAAAGACTTTCCTCTTAGTCGAGCCAAGTTAAGAATGTTCTTATGTTGCC 277

Qy    1952 CAGTGTGTTTCTGATCTGATGCAAGCAAGAAACACTGGGCTTCTAGAACCAGGCAACTTG 2011
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     276 CAGTGTGTTTCTGATCTGATGCAAGCAAGAAACACTGGGCTTCTAGAACCAGGCAACTTG 217

Qy    2012 GGAACTAGACTCCCAAGCTGGACTATGGCTCTACTTTCAGGCCACATGGCTAAAGAAGGT 2071
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     216 GGAACTAGACTCCCAAGCTGGACTATGGCTCTACTTTCAGGCCACATGGCTAAAGAAGGT 157

Qy    2072 TTCAGAAAGAAGTGGGGACAGAGCAGAACTTTCACCTTCATATATTTGTATGATCCTAAT 2131
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     156 TTCAGAAAGAAGTGGGGACAGAGCAGAACTTTCACCTTCATATATTTGTATGATCCTAAT 97

Qy    2132 GAATGCATAAAATGTTAAGTTGATGGTGATGAAATGTAAATACTGTTTTTAACAACTATG 2191
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      96 GAATGCATAAAATGTTAAGTTGATGGTGATGAAATGTAAATACTGTTTTTAACAACTATG 37

Qy    2192 ATTTGGAAAATAAATCAATGCTATAACTATGTTGAT 2227
           |||||||||||||||||||||||||||||||||||
Db      36 ATTTGGAAAATAAATCAATGCTATAACTATGTTGAT 1


RESULT 2
BQ027284/c
LOCUS       BQ027284                 407 bp    mRNA    linear   EST 27-MAR-2002
DEFINITION  UI-H-CO0-aqo-h-07-0-UI.s1 NCI_CGAP_Sub9 Homo sapiens cDNA clone
            IMAGE:3104867 3', mRNA sequence.
ACCESSION   BQ027284
VERSION     BQ027284.1  GI:19762563
KEYWORDS    EST.
SOURCE      human.
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 407)
  AUTHORS   NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
  TITLE     National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
            Tumor Gene Index
  JOURNAL   Unpublished (1997)
COMMENT     Contact: Robert Strausberg, Ph.D.
            Email: cgapbs-r@mail.nih.gov
            Tissue Procurement: Dr. Jose Mercuende
             cDNA Library preparation: Dr. M. Bento Soares, University of Iowa
             cDNA Library Arrayed by: Dr. M. Bento Soares, University of Iowa
             DNA Sequencing by: Dr. M. Bento Soares, University of Iowa
             Clone Distribution: Clone distribution information can be found
            through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
            Seq primer: M13 FORWARD
            POLYA=Yes.
FEATURES             Location/Qualifiers
     source          1. .407
                     /organism="Homo sapiens"
                     /db_xref="taxon:9606"
                     /clone="IMAGE:3104867"
                     /clone_lib="NCI_CGAP_Sub9"
                     /tissue_type="mixed"
                     /dev_stage="mixed"
                     /lab_host="DH10B (Life Technologies)"
                     /note="Vector: pT7T3-Pac (Pharmacia) with a modified
                     polylinker; Site_1: EcoR I; Site_2: Not I; tissues:
                     Cholonic mucosa with Crohns disease, Cholonic mucosa with
                     ulcerative colitis, Fetal thymus, Cervix, Cervical
                     adenosquamous carcinoma, Ligament cells, Prostate
                     carcinoma, Bladder carcinoma, Brain oligodenroga ;
                     NCI_CGAP_Sub9 is a subtracted cDNA library constructed
                     according to Bonaldo, Lennon and Soares, Genome Research,
                     6:791-806, 1996. First strand cDNA synthesis was primed
                     with an oligo-dT primer containing a Not I site. Double
                     stranded cDNA was ligated to an EcoR I adaptor, digested
                     with Not I, and cloned directionally into pT7T3-Pac
                     vector. The oligonucleotide used to prime the synthesis of
                     first-strand cDNA contains a library tag sequence that is
                     located between the Not I site and the (dT)18 tail. The
                     sequence tags for this library are CGTC, AACG, GGGCC,
                     GGAAG, TAGC, TAAGC, ATGG, AGACA, ATCAC. For additional
                     information, contact: Bento Soares, bento-soares@uiowa.edu
                     TAG_LIB=UI-H-CO0
                     TAG_TISSUE=Cervical Adenosquamous Carcinoma
                     TAG_SEQ=CGAAG"
BASE COUNT      115 a      83 c      64 g     145 t
ORIGIN

  Query Match             16.4%;  Score 367;  DB 14;  Length 407;
  Best Local Similarity   100.0%;  Pred. No. 5.2e-185;
  Matches  367;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    1860 TATTGGTAAAGAATGGAAGGTGGAGAAGCTCCCTGAAGTAAGCAAAGACTTTCCTCTTAG 1919
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     384 TATTGGTAAAGAATGGAAGGTGGAGAAGCTCCCTGAAGTAAGCAAAGACTTTCCTCTTAG 325

Qy    1920 TCGAGCCAAGTTAAGAATGTTCTTATGTTGCCCAGTGTGTTTCTGATCTGATGCAAGCAA 1979
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     324 TCGAGCCAAGTTAAGAATGTTCTTATGTTGCCCAGTGTGTTTCTGATCTGATGCAAGCAA 265

Qy    1980 GAAACACTGGGCTTCTAGAACCAGGCAACTTGGGAACTAGACTCCCAAGCTGGACTATGG 2039
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     264 GAAACACTGGGCTTCTAGAACCAGGCAACTTGGGAACTAGACTCCCAAGCTGGACTATGG 205

Qy    2040 CTCTACTTTCAGGCCACATGGCTAAAGAAGGTTTCAGAAAGAAGTGGGGACAGAGCAGAA 2099
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     204 CTCTACTTTCAGGCCACATGGCTAAAGAAGGTTTCAGAAAGAAGTGGGGACAGAGCAGAA 145

Qy    2100 CTTTCACCTTCATATATTTGTATGATCCTAATGAATGCATAAAATGTTAAGTTGATGGTG 2159
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     144 CTTTCACCTTCATATATTTGTATGATCCTAATGAATGCATAAAATGTTAAGTTGATGGTG 85

Qy    2160 ATGAAATGTAAATACTGTTTTTAACAACTATGATTTGGAAAATAAATCAATGCTATAACT 2219
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      84 ATGAAATGTAAATACTGTTTTTAACAACTATGATTTGGAAAATAAATCAATGCTATAACT 25

Qy    2220 ATGTTGA 2226
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          |||||||
Db      24 ATGTTGA 18


RESULT 3
AV715904
LOCUS       AV715904                469 bp    mRNA    linear   EST 11-OCT-2000
DEFINITION  AV715904 DCB Homo sapiens cDNA clone DCBAMF09 5', mRNA sequence.
ACCESSION   AV715904
VERSION     AV715904.1  GI:10797421
KEYWORDS    EST.
SOURCE      human.
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 469)
  AUTHORS   Xu,X., Gu,J., Liu,F., Qu,J., Zhao,M., Li,Y., Huang,Q., Zhou,J.,
            Song,H., Gu,Y., Yang,Y., Gao,G., Xiao,H., Li,N., Qian,B., Gao,X.,
            Cheng,Z., Xu,S., Gu,W., Tu,Y., Jia,J., Fu,G., Ren,S., Zhong,M., Lu
            ,G., Cheng,Z. and Han,Z.
  TITLE     Homo sapiens cDNA DCB clones
  JOURNAL   Unpublished (2000)
COMMENT     Contact: Zeguang Han
            Chinese National Human Genome Center at Shanghai
            351 Guo Shoujing Road, Zhangjiang Hi-Tech Park, Pudong, Shanghai
            201203, P. R. China
            Tel: 86-21-50801919(ex.45)
            Fax: 86-21-50801922
            Email: hanzg@chgc.sh.cn
            This clone is available at CHGC in Shanghai.
FEATURES             Location/Qualifiers
     source          1. .469
                     /organism="Homo sapiens"
                     /db_xref="taxon:9606"
                     /clone="DCBAMF09"
                     /clone_lib="DCB"
                     /cell_type="dendritic cells"
                     /dev_stage="mature"
                     /lab_host="BM25.8"
                     /note="Vector: pTriplEx2; Site_1: sfiIA; Site_2: sfiIB"
BASE COUNT      133 a     81 c    109 g    146 t
ORIGIN

  Query Match             16.1%;  Score 359;  DB 10;  Length 469;
  Best Local Similarity   99.8%;  Pred. No. 1e-180;
  Matches  409;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy   1288 CTGGGTTGGAAAACAGTATTTTCCAAACTACCTTCCAGTTCCTCATTTTTGAATACAGGC 1347
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     54 CTGGGTTGGAAAACAGTATTTTCCAAACTACCTTCCAGTTCCTCATTTTTGAATACAGGC 113

Qy   1348 ATAGAGTTCAGACTTTTTTTAAATAGTAAAAATAAAATTAAAGCTGAAAACTGCAACTTG 1407
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    114 ATAGAGTTCAGACTTTTTTTAAATAGTAAAAATAAAATTAAAGCTGAAAACTGCAACTTG 173

Qy   1408 TAAATGTGGTAAAGAGTTAGTTTGAGTTGCTATCATGTCAAACGTGAAAATGCTGTATTA 1467
          |||||||||||||||||||||||||| ||||||||||||||||||||||||||||||||
Db    174 TAAATGTGGTAAAGAGTTAGTTTGAGTTACTATCATGTCAAACGTGAAAATGCTGTATTA 233

Qy   1468 GTCACAGAGATAATTCTAGCTTTGAGCTTAAGAATTTTGAGCAGGTGGTATGTTTGGGAG 1527
          |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    234 GTCACAGAGATAATTCTAGCTTTGAGCTTAAGAATTTTGAGCAGGTGGTATGTTTGGGAG 293

Qy   1528 ACTGCTGAGTCAACCCAATAGTTGTTGATTGGCAGGAGTTGGAAGTGTGTGATCTGTGGG 1587
          |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    294 ACTGCTGAGTCAACCCAATAGTTGTTGATTGGCAGGAGTTGGAAGTGTGTGATCTGTGGG 353

Qy   1588 CACATTAGCCTATGTGCATGCAGCATCTAAGTAATGATGTCGTTTGAATCACAGTATACG 1647
          |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    354 CACATTAGCCTATGTGCATGCAGCATCTAAGTAATGATGTCGTTTGAATCACAGTATACG 413

Qy   1648 CTCCATCGCTGTCATCTCAGCTGGATCTCCATTCTCTCAGGCTTGCTGCC 1697
          |||||||||||||||||||||||||||||||||||||||||||||||||||
Db    414 CTCCATCGCTGTCATCTCAGCTGGATCTCCATTCTCTCAGGCTTGCTGCC 463


RESULT 4
AA807940/c
LOCUS       AA807940                398 bp    mRNA    linear   EST 12-FEB-1998
DEFINITION  nu90f10.s1 NCI_CGAP_Pr22 Homo sapiens cDNA clone IMAGE:1217995 3',
            mRNA sequence.
ACCESSION   AA807940
VERSION     AA807940.1  GI:2877346
KEYWORDS    EST.
SOURCE      human.
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 398)
  AUTHORS   NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
  TITLE     National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
            Tumor Gene Index
  JOURNAL   Unpublished (1997)
COMMENT     Contact: Robert Strausberg, Ph.D.
            Email: cgapbs-r@mail.nih.gov
            Tissue Procurement: Michael J. Brownstein, M.D., Ph.D., Michael R.
            Emmert-Buck, M.D., Ph.D.
            cDNA Library Preparation: M. Bento Soares, Ph.D.
            cDNA Library Arrayed by: Greg Lennon, Ph.D.
            DNA Sequencing by: Washington University Genome Sequencing Center
            Clone distribution: NCI-CGAP clone distribution information can be
            found through the I.M.A.G.E. Consortium/LLNL at:
            www-bio.llnl.gov/bbrp/image/image.html
            Seq primer: -40m13 fwd. ET from Amersham
            High quality sequence stop: 385.
FEATURES             Location/Qualifiers
     source          1. .398
                     /organism="Homo sapiens"
                     /db_xref="taxon:9606"
                     /clone="IMAGE:1217995"
                     /clone_lib="NCI_CGAP_Pr22"
                     /sex="male"
                     /tissue_type="normal prostate"
                     /lab_host="DH10B"
                     /note="Organ: prostate; Vector: pT7T3D-Pac (Pharmacia)
                     with a modified polylinker; 1st strand cDNA was prepared
                     from normal prostate bulk tissue, and was then primed with
                     a Not I - oligo(dT) primer. Double-stranded cDNA was
                     ligated to Eco RI adaptors (Pharmacia), digested with Not
                     I and cloned into the Not I  and Eco RI sites of the
                     modified pT7T3 vector.  Library is normalized, and was
                     constructed by Bento Soares and M. Fatima Bonaldo. "
BASE COUNT      117 a     87 c     73 g    121 t
ORIGIN

  Query Match             15.8%;  Score 352;  DB 9;  Length 398;
  Best Local Similarity   100.0%;  Pred. No. 5.8e-177;
  Matches  352;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy   1832 TTGGCTTCTAATCAAAGCTTTTAAACCCTATTGGTAAAGAATGGAAGGTGGAGAAGCTCC 1891
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    352 TTGGCTTCTAATCAAAGCTTTTAAACCCTATTGGTAAAGAATGGAAGGTGGAGAAGCTCC 293

Qy   1892 CTGAAGTAAGCAAAGACTTTCCTCTTAGTCGAGCCAAGTTAAGAATGTTCTTATGTTGCC 1951
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    292 CTGAAGTAAGCAAAGACTTTCCTCTTAGTCGAGCCAAGTTAAGAATGTTCTTATGTTGCC 233

Qy   1952 CAGTGTGTTTCTGATCTGATGCAAGCAAGAAACACTGGGCTTCTAGAACCAGGCAACTTG 2011
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    232 CAGTGTGTTTCTGATCTGATGCAAGCAAGAAACACTGGGCTTCTAGAACCAGGCAACTTG 173

Qy   2012 GGAACTAGACTCCCAAGCTGGACTATGGCTCTACTTTCAGGCCACATGGCTAAAGAAGGT 2071
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    172 GGAACTAGACTCCCAAGCTGGACTATGGCTCTACTTTCAGGCCACATGGCTAAAGAAGGT 113

Qy   2072 TTCAGAAAGAAGTGGGGACAGAGCAGAACTTTCACCTTCATATATTTGTATGATCCTAAT 2131
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          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    112 TTCAGAAAGAAGTGGGGACAGAGCAGAACTTTCACCTTCATATATTTGTATGATCCTAAT 53

Qy   2132 GAATGCATAAAATGTTAAGTTGATGGTGATGAAATGTAAATACTGTTTTTAA 2183
          ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     52 GAATGCATAAAATGTTAAGTTGATGGTGATGAAATGTAAATACTGTTTTTAA 1
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RESULT 5
AA034153
LOCUS AA034153 563 bp mRNA linear EST 09-MAY-1997
DEFINITION zi06f10.r1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:430027 5', mRNA sequence.
ACCESSION AA034153
VERSION AA034153.1 GI:1505981
KEYWORDS EST.
SOURCE human.
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1 (bases 1 to 563)
AUTHORS Hillier,L., Lennon,G., Becker,M., Bonaldo,M.F., Chiapelli,B., Chissoe,S., Dietrich,N., DuBuque,T., Favello,A., Gish,W., Hawkins,M., Hultman,M., Kucaba,T., Lacy,M., Le,M., Le,N., Mardis,E., Moore,B., Morris,M., Parsons,J., Prange,C., Rifkin,L., Rohlfing,T., Schellenberg,K., Soares,M.B., Tan,F., Thierry-Meg,J., Trevaskis,E., Underwood,K., Wohldmann,P., Waterston,R., Wilson,R. and Marra,M.
TITLE Generation and analysis of 280,000 human expressed sequence tags
JOURNAL Genome Res. 6 (9), 807-828 (1996)
MEDLINE 97044478
COMMENT Contact: Wilson RK
Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
Tel: 314 286 1800
Fax: 314 286 1810
Email: est@watson.wustl.edu
This clone is available royalty-free through LLNL ; contact the IMAGE Consortium (info@image.llnl.gov) for further information.
Insert Length: 432 Std Error: 0.00
Seq primer: -28M13 rev2 from Amersham
High quality sequence stop: 305.

FEATURES Location/Qualifiers
source 1. .563
/organism="Homo sapiens"
/db_xref="GDB:1329796"
/db_xref="taxon:9606"
/clone="IMAGE:430027"
/clone_lib="Soares_fetal_liver_spleen_1NFLS_S1"
/sex="male"
/dev_stage="20 week-post conception fetus"
/lab_host="DH10B (ampicillin resistant)"
/note="Organ: Liver and Spleen; Vector: pT7T3D (Pharmacia) with a modified polylinker; Site_1: Pac I; Site_2: Eco RI; This is a subtracted version of the original Soares fetal liver spleen 1NFLS library. 1st strand cDNA was primed with a Pac I - oligo(dT) primer [5' AACTGGAAGAATTAATTAAAGATCTTTTTTTTTTTTTTTT 3'], double-stranded cDNA was ligated to Eco RI adaptors (Pharmacia), digested with Pac I and cloned into the Pac I and Eco RI sites of the modified pT7T3 vector. Library went through one round of normalization. Library constructed by Bento Soares and M.Fatima Bonaldo."

BASE COUNT 143 a 101 c 127 g 185 t 7 others
ORIGIN

Query Match 12.2%; Score 272; DB 9; Length 563;
Best Local Similarity 100.0%; Pred. No. 4.9e-134;
Matches 272; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy   1437 CTATCATGTCAAACGTGAAAATGCTGTATTAGTCACAGAGATAATTCTAGCTTTGAGCTT 1496
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     43 CTATCATGTCAAACGTGAAAATGCTGTATTAGTCACAGAGATAATTCTAGCTTTGAGCTT 102

Qy   1497 AAGAATTTTGAGCAGGTGGTATGTTTGGGAGACTGCTGAGTCAACCCAATAGTTGTTGAT 1556
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    103 AAGAATTTTGAGCAGGTGGTATGTTTGGGAGACTGCTGAGTCAACCCAATAGTTGTTGAT 162

Qy   1557 TGGCAGGAGTTGGAAGTGTGTGATCTGTGGGCACATTAGCCTATGTGCATGCAGCATCTA 1616
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    163 TGGCAGGAGTTGGAAGTGTGTGATCTGTGGGCACATTAGCCTATGTGCATGCAGCATCTA 222

Qy   1617 AGTAATGATGTCGTTTGAATCACAGTATACGCTCCATCGCTGTCATCTCAGCTGGATCTC 1676
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    223 AGTAATGATGTCGTTTGAATCACAGTATACGCTCCATCGCTGTCATCTCAGCTGGATCTC 282

Qy   1677 CATTCTCTCAGGCTTGCTGCCAAAAGCCTTTT 1708
          ||||||||||||||||||||||||||||||||
Db    283 CATTCTCTCAGGCTTGCTGCCAAAAGCCTTTT 314
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RESULT 6
H58584
LOCUS H58584 410 bp mRNA linear EST 05-OCT-1995
DEFINITION yr06f06.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:204515 5', mRNA sequence.
ACCESSION H58584
VERSION H58584.1 GI:1011416
KEYWORDS EST.
SOURCE human.
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1 (bases 1 to 410)
AUTHORS Hillier,L., Clark,N., Dubuque,T., Elliston,K., Hawkins,M., Holman,M., Hultman,M., Kucaba,T., Le,M., Lennon,G., Marra,M., Parsons,J., Rifkin,L., Rohlfing,T., Soares,M., Tan,F., Trevaskis,E., Waterston,R., Williamson,A., Wohldmann,P. and Wilson,R.
TITLE The WashU-Merck EST Project
JOURNAL Unpublished (1995)
COMMENT Contact: Wilson RK
Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
Tel: 314 286 1800
Fax: 314 286 1810
Email: est@watson.wustl.edu
Insert Size: 1007
High quality sequence stops: 300
Source: IMAGE Consortium, LLNL
This clone is available royalty-free through LLNL ; contact the IMAGE Consortium (info@image.llnl.gov) for further information.
Insert Length: 1007 Std Error: 0.00
Seq primer: M13RP1
High quality sequence stop: 300.

FEATURES Location/Qualifiers
source 1. .410
/organism="Homo sapiens"
/db_xref="GDB:3773646"
/db_xref="taxon:9606"
/clone="IMAGE:204515"
/clone_lib="Soares fetal liver spleen 1NFLS"
/sex="male"
/dev_stage="20 week-post conception fetus"
/lab_host="DH10B (ampicillin resistant)"
/note="Organ: Liver and Spleen; Vector: pT7T3D (Pharmacia) with a modified polylinker; Site_1: Pac I; Site_2: Eco RI; 1st strand cDNA was primed with a Pac I - oligo(dT) primer [5' AACTGGAAGAATTAATTAAAGATCTTTTTTTTTTTTTTTT 3'], double-stranded cDNA was ligated to Eco RI adaptors (Pharmacia), digested with Pac I and cloned into the Pac I and Eco RI sites of the modified pT7T3 vector. Library went through one round of normalization. Library constructed by Bento Soares and M.Fatima Bonaldo."

BASE COUNT 110 a 66 c 94 g 140 t
ORIGIN

Query Match 10.9%; Score 243; DB 14; Length 410;

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  Best Local Similarity   99.7%;  Pred. No. 1.7e-118;
  Matches  293;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy   1367 TAAATAGTAAAAATAAAATTAAAGCTGAAAACTGCAACTTGTAAATGTGGTAAAGAGTTA 1426
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      1 TAAATAGTAAAAATAAAATTAAAGCTGAAAACTGCAACTTGTAAATGTGGTAAAGAGTTA 60

Qy   1427 GTTTGAGTTGCTATCATGTCAAACGTGAAAATGCTGTATTAGTCACAGAGATAATTCTAG 1486
          ||||||||| ||||||||||||||||||||||||||||||||||||||||||||||||||
Db     61 GTTTGAGTTACTATCATGTCAAACGTGAAAATGCTGTATTAGTCACAGAGATAATTCTAG 120

Qy   1487 CTTTGAGCTTAAGAATTTTGAGCAGGTGGTATGTTTGGGAGACTGCTGAGTCAACCCAAT 1546
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    121 CTTTGAGCTTAAGAATTTTGAGCAGGTGGTATGTTTGGGAGACTGCTGAGTCAACCCAAT 180

Qy   1547 AGTTGTTGATTGGCAGGAGTTGGAAGTGTGTGATCTGTGGGCACATTAGCCTATGTGCAT 1606
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    181 AGTTGTTGATTGGCAGGAGTTGGAAGTGTGTGATCTGTGGGCACATTAGCCTATGTGCAT 240

Qy   1607 GCAGCATCTAAGTAATGATGTCGTTTGAATCACAGTATACGCTCCATCGCTGTC 1660
          ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    241 GCAGCATCTAAGTAATGATGTCGTTTGAATCACAGTATACGCTCCATCGCTGTC 294


RESULT 7
AA034154/c
LOCUS       AA034154                289 bp    mRNA    linear   EST 09-MAY-1997
DEFINITION  zi06f10.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA
            clone IMAGE:430027 3', mRNA sequence.
ACCESSION   AA034154
VERSION     AA034154.1  GI:1505982
KEYWORDS    EST.
SOURCE      human.
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 289)
  AUTHORS   Hillier,L., Lennon,G., Becker,M., Bonaldo,M.F., Chiapelli,B.,
            Chissoe,S., Dietrich,N., DuBuque,T., Favello,A., Gish,W., Hawkins
            ,M., Hultman,M., Kucaba,T., Lacy,M., Le,M., Le,N., Mardis,E., Moore
            ,B., Morris,M., Parsons,J., Prange,C., Rifkin,L., Rohlfing,T.,
            Schellenberg,K., Soares,M.B., Tan,F., Thierry-Meg,J., Trevaskis,E.,
            Underwood,K., Wohldmann,P., Waterston,R., Wilson,R. and Marra,M.
  TITLE     Generation and analysis of 280,000 human expressed sequence tags
  JOURNAL   Genome Res. 6 (9), 807-828 (1996)
  MEDLINE   97044478
COMMENT     Contact: Wilson RK
            Washington University School of Medicine
            4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
            Tel: 314 286 1800
            Fax: 314 286 1810
            Email: est@watson.wustl.edu
            This clone is available royalty-free through LLNL ; contact the
            IMAGE Consortium (info@image.llnl.gov) for further information.
            Insert Length: 432   Std Error: 0.00
            Seq primer: -40M13 fwd. from Amersham
            High quality sequence stop: 202.
FEATURES             Location/Qualifiers
     source          1. .289
                     /organism="Homo sapiens"
                     /db_xref="GDB:1329796"
                     /db_xref="taxon:9606"
                     /clone="IMAGE:430027"
                     /clone_lib="Soares_fetal_liver_spleen_1NFLS_S1"
                     /sex="male"
                     /dev_stage="20 week-post conception fetus"
                     /lab_host="DH10B (ampicillin resistant)"
                     /note="Organ: Liver and Spleen; Vector: pT7T3D (Pharmacia)
                     with a modified polylinker; Site_1: Pac I; Site_2: Eco RI;
                     This is a subtracted version of the original Soares fetal
                     liver spleen 1NFLS library.   1st strand cDNA was primed
                     with a Pac I - oligo(dT) primer [5'
                     AACTGGAAGAATTAATTAAAGATCTTTTTTTTTTTTTTTTT 3'],
                     double-stranded cDNA was ligated to Eco RI adaptors
                     (Pharmacia), digested with Pac I and cloned into the Pac I
                     and Eco RI sites of the modified pT7T3 vector.  Library
                     went through one round of normalization. Library
                     constructed by Bento Soares and M.Fatima Bonaldo."
BASE COUNT       83 a     63 c     47 g     94 t      2 others
ORIGIN

  Query Match             10.7%;  Score 238;  DB 9;  Length 289;
  Best Local Similarity   100.0%;  Pred. No. 7.6e-116;
  Matches  238;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy   1995 TAGAACCAGGCAACTTGGGAACTAGACTCCCAAGCTGGACTATGGCTCTACTTTCAGGCC 2054
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    238 TAGAACCAGGCAACTTGGGAACTAGACTCCCAAGCTGGACTATGGCTCTACTTTCAGGCC 179

Qy   2055 ACATGGCTAAAGAAGGTTTCAGAAAGAAGTGGGGACAGAGCAGAACTTTCACCTTCATAT 2114
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    178 ACATGGCTAAAGAAGGTTTCAGAAAGAAGTGGGGACAGAGCAGAACTTTCACCTTCATAT 119

Qy   2115 ATTTGTATGATCCTAATGAATGCATAAAATGTTAAGTTGATGGTGATGAAATGTAAATAC 2174
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    118 ATTTGTATGATCCTAATGAATGCATAAAATGTTAAGTTGATGGTGATGAAATGTAAATAC 59

Qy   2175 TGTTTTTAACAACTATGATTTGGAAAATAAATCAATGCTATAACTATGTTGATAAAAG 2232
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     58 TGTTTTTAACAACTATGATTTGGAAAATAAATCAATGCTATAACTATGTTGATAAAAG 1


RESULT 8
H58597
LOCUS       H58597                  422 bp    mRNA    linear   EST 05-OCT-1995
DEFINITION  yr06h06.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone
            IMAGE:204539 5', mRNA sequence.
ACCESSION   H58597
VERSION     H58597.1  GI:1011429
KEYWORDS    EST.
SOURCE      human.
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 422)
  AUTHORS   Hillier,L., Clark,N., Dubuque,T., Elliston,K., Hawkins,M., Holman
            ,M., Hultman,M., Kucaba,T., Le,M., Lennon,G., Marra,M., Parsons,J.,
            Rifkin,L., Rohlfing,T., Soares,M., Tan,F., Trevaskis,E., Waterston
            ,R., Williamson,A., Wohldmann,P. and Wilson,R.
  TITLE     The WashU-Merck EST Project
  JOURNAL   Unpublished (1995)
COMMENT     Contact: Wilson RK
            Washington University School of Medicine
            4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
            Tel: 314 286 1800
            Fax: 314 286 1810
            Email: est@watson.wustl.edu
            Insert Size: 1025
            High quality sequence stops: 275
            Source: IMAGE Consortium, LLNL
            This clone is available royalty-free through LLNL ; contact the
            IMAGE Consortium (info@image.llnl.gov) for further information.
            Insert Length: 1025   Std Error: 0.00
            Seq primer: M13RP1
            High quality sequence stop: 275.
FEATURES             Location/Qualifiers
     source          1. .422
                     /organism="Homo sapiens"
                     /db_xref="GDB:3773670"
                     /db_xref="taxon:9606"
                     /clone="IMAGE:204539"
                     /clone_lib="Soares fetal liver spleen 1NFLS"
                     /sex="male"
                     /dev_stage="20 week-post conception fetus"
                     /lab_host="DH10B (ampicillin resistant)"
                     /note="Organ: Liver and Spleen; Vector: pT7T3D (Pharmacia)
```

with a modified polylinker; Site_1: Pac I; Site_2: Eco RI; 1st strand cDNA was primed with a Pac I - oligo(dT) primer [5' AACTGGAAGAATTAATTAAAGATCTTTTTTTTTTTTTTTTTT 3'], double-stranded cDNA was ligated to Eco RI adaptors (Pharmacia), digested with Pac I and cloned into the Pac I and Eco RI sites of the modified pT7T3 vector. Library went through one round of normalization. Library constructed by Bento Soares and M.Fatima Bonaldo."

BASE COUNT 108 a 69 c 97 g 145 t 3 others
ORIGIN

Query Match 10.6%; Score 236; DB 14; Length 422;
Best Local Similarity 99.7%; Pred. No. 9.5e-115;
Matches 286; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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Qy   1367 TAAATAGTAAAAATAAAATTAAAGCTGAAAACTGCAACTTGTAAATGTGGTAAAGAGTTA 1426
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      1 TAAATAGTAAAAATAAAATTAAAGCTGAAAACTGCAACTTGTAAATGTGGTAAAGAGTTA 60

Qy   1427 GTTTGAGTTGCTATCATGTCAAACGTGAAAATGCTGTATTAGTCACAGAGATAATTCTAG 1486
          ||||||||| ||||||||||||||||||||||||||||||||||||||||||||||||||
Db     61 GTTTGAGTTACTATCATGTCAAACGTGAAAATGCTGTATTAGTCACAGAGATAATTCTAG 120

Qy   1487 CTTTGAGCTTAAGAATTTTGAGCAGGTGGTATGTTTGGGAGACTGCTGAGTCAACCCAAT 1546
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    121 CTTTGAGCTTAAGAATTTTGAGCAGGTGGTATGTTTGGGAGACTGCTGAGTCAACCCAAT 180

Qy   1547 AGTTGTTGATTGGCAGGAGTTGGAAGTGTGTGATCTGTGGGCACATTAGCCTATGTGCAT 1606
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    181 AGTTGTTGATTGGCAGGAGTTGGAAGTGTGTGATCTGTGGGCACATTAGCCTATGTGCAT 240

Qy   1607 GCAGCATCTAAGTAATGATGTCGTTTGAATCACAGTATACGCTCCAT 1653
          |||||||||||||||||||||||||||||||||||||||||||||||
Db    241 GCAGCATCTAAGTAATGATGTCGTTTGAATCACAGTATACGCTCCAT 287
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RESULT 9
H58254/c
LOCUS H58254 467 bp mRNA linear EST 05-OCT-1995
DEFINITION yr06h06.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:204539 3', mRNA sequence.
ACCESSION H58254
VERSION H58254.1 GI:1011086
KEYWORDS EST.
SOURCE human.
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1 (bases 1 to 467)
AUTHORS Hillier,L., Clark,N., Dubuque,T., Elliston,K., Hawkins,M., Holman,M., Hultman,M., Kucaba,T., Le,M., Lennon,G., Marra,M., Parsons,J., Rifkin,L., Rohlfing,T., Soares,M., Tan,F., Trevaskis,E., Waterston,R., Williamson,A., Wohldmann,P. and Wilson,R.
TITLE The WashU-Merck EST Project
JOURNAL Unpublished (1995)
COMMENT Contact: Wilson RK
Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
Tel: 314 286 1800
Fax: 314 286 1810
Email: est@watson.wustl.edu
Insert Size: 1025
High quality sequence stops: 344
Source: IMAGE Consortium, LLNL
This clone is available royalty-free through LLNL ; contact the IMAGE Consortium (info@image.llnl.gov) for further information.
Insert Length: 1025 Std Error: 0.00
Seq primer: Promega -21m13
High quality sequence stop: 344.
FEATURES Location/Qualifiers
source 1. .467
/organism="Homo sapiens"
/db_xref="GDB:3773670"
/db_xref="taxon:9606"
/clone="IMAGE:204539"
/clone_lib="Soares fetal liver spleen 1NFLS"
/sex="male"
/dev_stage="20 week-post conception fetus"
/lab_host="DH10B (ampicillin resistant)"
/note="Organ: Liver and Spleen; Vector: pT7T3D (Pharmacia) with a modified polylinker; Site_1: Pac I; Site_2: Eco RI; 1st strand cDNA was primed with a Pac I - oligo(dT) primer [5' AACTGGAAGAATTAATTAAAGATCTTTTTTTTTTTTTTTTTT 3'], double-stranded cDNA was ligated to Eco RI adaptors (Pharmacia), digested with Pac I and cloned into the Pac I and Eco RI sites of the modified pT7T3 vector. Library went through one round of normalization. Library constructed by Bento Soares and M.Fatima Bonaldo."

BASE COUNT 125 a 98 c 91 g 146 t 7 others
ORIGIN

Query Match 10.4%; Score 232; DB 14; Length 467;
Best Local Similarity 100.0%; Pred. No. 1.3e-112;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy   2000 CCAGGCAACTTGGGAACTAGACTCCCAAGCTGGACTATGGCTCTACTTTCAGGCCACATG 2059
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    239 CCAGGCAACTTGGGAACTAGACTCCCAAGCTGGACTATGGCTCTACTTTCAGGCCACATG 180

Qy   2060 GCTAAAGAAGGTTTCAGAAAGAAGTGGGGACAGAGCAGAACTTTCACCTTCATATATTTG 2119
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    179 GCTAAAGAAGGTTTCAGAAAGAAGTGGGGACAGAGCAGAACTTTCACCTTCATATATTTG 120

Qy   2120 TATGATCCTAATGAATGCATAAAATGTTAAGTTGATGGTGATGAAATGTAAATACTGTTT 2179
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    119 TATGATCCTAATGAATGCATAAAATGTTAAGTTGATGGTGATGAAATGTAAATACTGTTT 60

Qy   2180 TTAACAACTATGATTTGGAAAATAAATCAATGCTATAACTATGTTGATAAAA 2231
          ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     59 TTAACAACTATGATTTGGAAAATAAATCAATGCTATAACTATGTTGATAAAA 8
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RESULT 10
H58245/c
LOCUS H58245 461 bp mRNA linear EST 05-OCT-1995
DEFINITION yr06f06.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:204515 3', mRNA sequence.
ACCESSION H58245
VERSION H58245.1 GI:1011077
KEYWORDS EST.
SOURCE human.
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1 (bases 1 to 461)
AUTHORS Hillier,L., Clark,N., Dubuque,T., Elliston,K., Hawkins,M., Holman,M., Hultman,M., Kucaba,T., Le,M., Lennon,G., Marra,M., Parsons,J., Rifkin,L., Rohlfing,T., Soares,M., Tan,F., Trevaskis,E., Waterston,R., Williamson,A., Wohldmann,P. and Wilson,R.
TITLE The WashU-Merck EST Project
JOURNAL Unpublished (1995)
COMMENT Contact: Wilson RK
Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
Tel: 314 286 1800
Fax: 314 286 1810
Email: est@watson.wustl.edu
Insert Size: 1007
High quality sequence stops: 335
Source: IMAGE Consortium, LLNL
This clone is available royalty-free through LLNL ; contact the IMAGE Consortium (info@image.llnl.gov) for further information.
Insert Length: 1007 Std Error: 0.00
Seq primer: Promega -21m13
High quality sequence stop: 335.
FEATURES Location/Qualifiers

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    source          1. .461
                    /organism="Homo sapiens"
                    /db_xref="GDB:3773646"
                    /db_xref="taxon:9606"
                    /clone="IMAGE:204515"
                    /clone_lib="Soares fetal liver spleen 1NFLS"
                    /sex="male"
                    /dev_stage="20 week-post conception fetus"
                    /lab_host="DH10B (ampicillin resistant)"
                    /note="Organ: Liver and Spleen; Vector: pT7T3D (Pharmacia)
                    with a modified polylinker; Site_1: Pac I; Site_2: Eco RI;
                    1st strand cDNA was primed with a Pac I - oligo(dT) primer
                    [5' AACTGGAAGAATTAATTAAAGATCTTTTTTTTTTTTTTTTTT 3'],
                    double-stranded cDNA was ligated to Eco RI adaptors
                    (Pharmacia), digested with Pac I and cloned into the Pac I
                    and Eco RI sites of the modified pT7T3 vector.  Library
                    went through one round of normalization. Library
                    constructed by Bento Soares and M.Fatima Bonaldo."
BASE COUNT      119 a     97 c     96 g    144 t      5 others
ORIGIN

  Query Match             8.0%;  Score 179;  DB 14;  Length 461;
  Best Local Similarity   99.6%;  Pred. No. 3.6e-84;
  Matches  229;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy    2000 CCAGGCAACTTGGGAACTAGACTCCCAAGCTGGACTATGGCTCTACTTTCAGGCCACATG 2059
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     230 CCAGGCAACTTGGGAACTAGACTCCCAAGCTGGACTATGGCTCTACTTTCAGGCCACATG 171

Qy    2060 GCTAAAGAAGGTTTCAGAAAGAAGTGGGGACAGAGCAGAACTTTCACCTTCATATATTTG 2119
           |||||||||||||||||||||||||||||||||||||||||||||| ||||||||||||
Db     170 GCTAAAGAAGGTTTCAGAAAGAAGTGGGGACAGAGCAGAACTTTCACCNTCATATATTTG 111

Qy    2120 TATGATCCTAATGAATGCATAAAATGTTAAGTTGATGGTGATGAAATGTAAATACTGTTT 2179
           |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     110 TATGATCCTAATGAATGCATAAAATGTTAAGTTGATGGTGATGAAATGTAAATACTGTTT 51

Qy    2180 TTAACAACTATGATTTGGAAAATAAATCAATGCTATAACTATGTTGATAA 2229
           ||||||||||||||||||||||||||||||||||||||||||||||||||
Db      50 TTAACAACTATGATTTGGAAAATAAATCAATGCTATAACTATGTTGATAA 1


RESULT 11
B84215
LOCUS       B84215                   469 bp    DNA     linear   GSS 09-APR-1999
DEFINITION  RPCI11-22K6.TV RPCI-11 Homo sapiens genomic clone RPCI-11-22K6, DNA
            sequence.
ACCESSION   B84215
VERSION     B84215.1  GI:2925347
KEYWORDS    GSS.
SOURCE      human.
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 469)
  AUTHORS   Adams,M.D., Rounsley,S.D., Zhao,S., Field,C.E., Bass,S., Linher,K.,
            Golden,K., Berry,K., Granger,D., Suh,E., Wible,C., de Jong,P. and
            Venter,J.C.
  TITLE     Use of BAC End Sequences for Sequence-Ready Map Building (1998)
  JOURNAL   Unpublished (1998)
COMMENT     Other_GSSs: RPCI11-22K6.TP
            Contact: Mark Adams
            Department of Eukaryotic Genomics
            The Institute for Genomic Research
            9712 Medical Center Dr., Rockville, MD 20850, USA
            Tel: 301 838 0200
            Fax: 301 838 0208
            Email: mdadams@tigr.org
            Clones are derived from the human BAC library RPCI-11. For BAC
            library availability, please contact Pieter de Jong
            (pieter@dejong.med.buffalo.edu). Clones may be purchased from
            BACPAC Resources (http://bacpac.med.buffalo.edu/ordering) or from
            Research Genetics (info@resgen.com). BAC end search page:
            http://www.tigr.org/tdb/humgen/bac_end_search/bac_end_search.html
            Seq primer: T7
            Class: BAC ends.
FEATURES            Location/Qualifiers
     source         1. .469
                    /organism="Homo sapiens"
                    /db_xref="GDB:7508309"
                    /db_xref="taxon:9606"
                    /clone="RPCI-11-22K6"
                    /clone_lib="RPCI-11"
                    /sex="Male"
                    /cell_type="Lymphocytes"
                    /note="Vector: pBACe3.6; Site_1: EcoRI; Site_2: EcoRI;
                    RPCI11 Human Male BAC Library"
BASE COUNT      141 a    103 c    113 g    112 t
ORIGIN

  Query Match             5.7%;  Score 128;  DB 17;  Length 469;
  Best Local Similarity   100.0%;  Pred. No. 8e-57;
  Matches  128;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy     853 TTCGGCCTGAGTAACTGTGAAAGCACCAGTCAACTGGACCAAGCCACGCAGGTGACAGAG 912
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1 TTCGGCCTGAGTAACTGTGAAAGCACCAGTCAACTGGACCAAGCCACGCAGGTGACAGAG 60

Qy     913 ACTCTTGGGATGACTCACTGCTGCATCAATCCCATCATCTATGCCTTCGTTGGGGAGAAG 972
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      61 ACTCTTGGGATGACTCACTGCTGCATCAATCCCATCATCTATGCCTTCGTTGGGGAGAAG 120

Qy     973 TTCAGAAG 980
           ||||||||
Db     121 TTCAGAAG 128


RESULT 12
AI312331
LOCUS       AI312331                 176 bp    mRNA    linear   EST 18-MAR-1999
DEFINITION  ta78e11.x2 NCI_CGAP_HSC2 Homo sapiens cDNA clone IMAGE:2050220 3',
            mRNA sequence.
ACCESSION   AI312331
VERSION     AI312331.1  GI:4017936
KEYWORDS    EST.
SOURCE      human.
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 176)
  AUTHORS   NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
  TITLE     National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
            Tumor Gene Index
  JOURNAL   Unpublished (1997)
COMMENT     Contact: Robert Strausberg, Ph.D.
            Email: cgapbs-r@mail.nih.gov
            Tissue Procurement: Herbert Morse, M.D., Michael R. Emmert-Buck,
            M.D., Ph.D.
            cDNA Library Preparation: David B. Krizman, Ph.D.
            cDNA Library Arrayed by: Greg Lennon, Ph.D.
            DNA Sequencing by: Washington University Genome Sequencing Center
            Clone distribution: NCI-CGAP clone distribution information can be
            found through the I.M.A.G.E. Consortium/LLNL at:
            www-bio.llnl.gov/bbrp/image/image.html
            Insert Length: 266   Std Error: 0.00
            Seq primer: -40UP from Gibco.
FEATURES            Location/Qualifiers
     source         1. .176
                    /organism="Homo sapiens"
                    /db_xref="taxon:9606"
                    /clone="IMAGE:2050220"
                    /clone_lib="NCI_CGAP_HSC2"
                    /tissue_type="stem cell 34+/38+"
                    /dev_stage="adult"
                    /lab_host="DH10B"
                    /note="Organ: bone marrow; Vector: pAMP1; mRNA made from
```

bone marrow, stem cells 34+/38+, cDNA made by oligo-dT priming. Directionally cloned. Size-selected on agarose gel, average insert size 400 bp. Primary library, non-amplified. "

BASE COUNT 82 a 23 c 27 g 44 t
ORIGIN

Query Match 5.5%; Score 122; DB 9; Length 176;
Best Local Similarity 100.0%; Pred. No. 1.2e-53;
Matches 122; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy   1290 GGGTTGGAAAACAGTATTTTCCAAACTACCTTCCAGTTCCTCATTTTTGAATACAGGCAT 1349
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     16 GGGTTGGAAAACAGTATTTTCCAAACTACCTTCCAGTTCCTCATTTTTGAATACAGGCAT 75

Qy   1350 AGAGTTCAGACTTTTTTTAAATAGTAAAAATAAAATTAAAGCTGAAAACTGCAACTTGTA 1409
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     76 AGAGTTCAGACTTTTTTTAAATAGTAAAAATAAAATTAAAGCTGAAAACTGCAACTTGTA 135

Qy   1410 AA 1411
          ||
Db    136 AA 137
```

RESULT 13
BG315432
LOCUS BG315432 207 bp mRNA linear EST 28-FEB-2002
DEFINITION PO2.0.308 Human THP1 cell line library Homo sapiens cDNA, mRNA sequence.
ACCESSION BG315432
VERSION BG315432.1 GI:18998304
KEYWORDS EST.
SOURCE human.
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1 (bases 1 to 207)
AUTHORS Andersson,T., Borang,S., Larsson,M., Thelin,A., Ekstrand-Hammarsrom,B., Wirta,V., Wenborg,A., Lundeberg,J. and Odeberg,J.
TITLE Identification of candidate genes in atherosclerosis - Virtual chip analysis in RDA based transcript profiling of monocyte/macrophage response to oxidised LDL
JOURNAL Unpublished (2001)
COMMENT Contact: Andersson Tove
Department of Biotechnology
KTH
Teknikringen 34, plan 6, 100 44 Stockholm, Sweden
Tel: +46 8 790 71 29
Fax: +46 8 245452
Email: tove@biochem.kth.se
POLYA=No.
FEATURES Location/Qualifiers
source 1. .207
/organism="Homo sapiens"
/db_xref="taxon:9606"
/clone_lib="Human THP1 cell line library"
/cell_line="THP1"
/note="Vector: pRIT28; Site_1: BamHI; Site_2: BamHI; Shotgun cloning of RDA difference products. Macrophage and foamcell libraries were submitted to successive rounds of subtractive hybridisations generating populations of gene fragments that are differentially expressed in macrophage to foam cell formation."
BASE COUNT 52 a 45 c 52 g 55 t 3 others
ORIGIN

Query Match 4.8%; Score 108; DB 12; Length 207;
Best Local Similarity 100.0%; Pred. No. 3.8e-46;
Matches 108; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy   1244 GTCTACGTTACCAGGCAGGAAGGCTGAGAGGAGAGAGACTCCAGCTGGGTTGGAAAACAG 1303
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    100 GTCTACGTTACCAGGCAGGAAGGCTGAGAGGAGAGAGACTCCAGCTGGGTTGGAAAACAG 159
```

```
Qy   1304 TATTTTCCAAACTACCTTCCAGTTCCTCATTTTTGAATACAGGCATAG 1351
          |||||||||||||||||||||||||||||||||||||||||||||||||
Db    160 TATTTTCCAAACTACCTTCCAGTTCCTCATTTTTGAATACAGGCATAG 207
```

RESULT 14
BF175316
LOCUS BF175316 121 bp mRNA linear EST 23-MAR-2001
DEFINITION MYE4866 Myeloma (MYE) cDNA library Homo sapiens cDNA, mRNA sequence.
ACCESSION BF175316
VERSION BF175316.1 GI:13441530
KEYWORDS EST.
SOURCE human.
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1 (bases 1 to 121)
AUTHORS Claudio,J.O., Tang,H., Khan,E.M., Voralia,M., Li,Z., Cukerman,E., Franciso-Pabalan,O., Liew,C.C. and Stewart,A.K.
TITLE The transcriptional phenotype of myeloma cells
JOURNAL Unpublished (2000)
COMMENT Contact: A. Keith Stewart, M.D.
Oncology Research
University Health Network
610 University Ave., 5-126, Toronto, Ontario, M5G 2M9, Canada
Tel: (416) 946-4639
Fax: (416) 946-6546
Email: k.stewart@utoronto.ca
PCR PRimers
FORWARD: 5'-GCCAAGCTCGAAATTAACCCTCACTAAAGGG-3'
BACKWARD: 5'-CCAGTGAATTGTAATACGACTCACTATAGGGCG-3'
Seq primer: 5'-GAAATTAACCCTCACTAAAGG-3'.
FEATURES Location/Qualifiers
source 1. .121
/organism="Homo sapiens"
/db_xref="taxon:9606"
/clone_lib="Myeloma (MYE) cDNA library"
/sex="male"
/tissue_type="Blood"
/cell_type="myeloma"
/dev_stage="multiple myeloma"
/note="Vector: Lambda Zap Express; Site_1: EcoRI; Site_2: XhoI; Myeloma cells from multiple myeloma patients' bone marrow were purified by magnetic cell sorting. mRNA were purified and an oligo d(T)18 primer containing XhoI restriction site was used to prime first strand synthesis using M-MLV reverse transcriptase. To protect the cDNAs from XhoI digestion in subsequent cloning step, the nucleotide analogue 5-methyl-dCTP was added to the nucleotide mixture and [a-32P]dATP was added to monitor the quantity and quality of first strand synthesis. After second-strand synthesis and blunting of cDNA termini, EcoRI adapters were ligated, followed by kinase treatment and digestion with XhoI. The cDNAs were then size-fractionated using Sephacryl S-500 column and then ligated into EcoRI and XhoI digested Lambda Zap Express vector. The ligation product was packaged using Gigapack II packaging extract. The library had primary titre of approx. 1x106. Clones from the primary library were randomly selected for single pass sequencing."
BASE COUNT 21 a 27 c 26 g 47 t
ORIGIN

Query Match 3.0%; Score 68; DB 12; Length 121;
Best Local Similarity 100.0%; Pred. No. 1e-24;
Matches 68; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy   1674 CTCCATTCTCTCAGGCTTGCTGCCAAAAGCCTTTTGTGTTTTGTTTTGTATCATTATGAA 1733
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       2 CTCCATTCTCTCAGGCTTGCTGCCAAAAGCCTTTTGTGTTTTGTTTTGTATCATTATGAA 61
```

```
Qy   1734 GTCATGCG 1741
          ||||||||
Db     62 GTCATGCG 69


RESULT 15
BI764263
LOCUS       BI764263                807 bp    mRNA    linear   EST 25-SEP-2001
DEFINITION  603045953F1 NIH_MGC_116 Homo sapiens cDNA clone IMAGE:5186388 5',
            mRNA sequence.
ACCESSION   BI764263
VERSION     BI764263.1  GI:15755841
KEYWORDS    EST.  .
SOURCE      human.
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 807)
  AUTHORS   NIH-MGC http://mgc.nci.nih.gov/.
  TITLE     National Institutes of Health, Mammalian Gene Collection (MGC)
  JOURNAL   Unpublished (1999)
COMMENT     Contact: Robert Strausberg, Ph.D.
            Email: cgapbs-r@mail.nih.gov
            Tissue Procurement: Life Technologies, Inc.
             cDNA Library Preparation: Life Technologies, Inc.
             cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
             DNA Sequencing by: Incyte Genomics, Inc.
             Clone distribution: MGC clone distribution information can be
            found through the I.M.A.G.E. Consortium/LLNL at:
            http://image.llnl.gov
            Plate: LLAM11465  row: i  column: 13
            High quality sequence stop: 805.
FEATURES             Location/Qualifiers
     source          1. .807
                     /organism="Homo sapiens"
                     /db_xref="taxon:9606"
                     /clone="IMAGE:5186388"
                     /clone_lib="NIH_MGC_116"
                     /lab_host="DH10B"
                     /note="Organ: pooled colon, kidney, stomach; Vector:
                     pCMV-SPORT6; Site_1: NotI; Site_2: EcoRV (destroyed); RNA
                     source anonymous pool of 3 colons, age 26 yo male, 49 yo
                     female, 71 yo male colon; 46 yo male kidney, and pool of 2
                     stomachs, 62 yo male and 70 yo female.  Library is
                     oligo-dT primed and  directionally cloned (EcoRV site is
                     destroyed upon cloning).  Average insert size 1.4 kb,
                     insert size range 1-3 kb.  Library is normalized and
                     enriched for full-length clones and was constructed by C.
                     Gruber  (Invitrogen).  Research Genetics tracking code
                     023. Note: this is a NIH_MGC Library."
BASE COUNT      186 a    209 c    171 g    241 t
ORIGIN

  Query Match             2.9%;  Score 65;  DB 13;  Length 807;
  Best Local Similarity   100.0%;  Pred. No. 5.3e-23;
  Matches   65;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy     466 GTCCATGCTGTGTTTGCTTTAAAAGCCAGGACGGTCACCTTTGGGGTGGTGACAAGTGTG 525
           |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     433 GTCCATGCTGTGTTTGCTTTAAAAGCCAGGACGGTCACCTTTGGGGTGGTGACAAGTGTG 492

Qy     526 ATCAC 530
           |||||
Db     493 ATCAC 497


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Job time : 2856 secs
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